lower height provided they can be easily folded up or moved out of the way.

- (2) The height of the water closet shall be 17 inches to 19 inches measured to the top of the toilet seat. Seats shall not be sprung to return to a lifted position.
- (3) A grab bar at least 24 inches long shall be mounted behind the water closet, and a horizontal grab bar at least 40 inches long shall be mounted on at least one side wall, with one end not more than 12 inches from the back wall, at a height between 33 inches and 36 inches above the floor.
- (4) Faucets and flush controls shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf (22.2 N). Controls for flush valves shall be mounted no more than 44 inches above the floor.
- (5) Doorways on the end of the enclosure, opposite the water closet, shall have a minimum clear opening width of 32 inches. Doorways on the side wall shall have a minimum clear opening width of 39 inches. Door latches and hardware shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist.
- (b) Restrooms required to be accessible shall be in close proximity to at least one seating location for persons using mobility aids and shall be connected to such a space by an unobstructed path having a minimum width of 32 inches.

#### §38.109 Between-car barriers.

Where vehicles operate in a high-platform, level-boarding mode, and where between-car bellows are not provided, devices or systems shall be provided to prevent, deter or warn individuals from inadvertently stepping off the platform between cars. Appropriate devices include, but are not limited to, pantograph gates, chains, motion detectors or other suitable devices.

# Subpart F—Intercity Rail Cars and Systems

## §38.111 General.

(a) New, used and remanufactured intercity rail cars, to be considered accessible by regulations in part 37 of

this title shall comply with this subpart to the extent required for each type of car as specified below.

- (1) Single-level rail passenger coaches and food service cars (other than single-level dining cars) shall comply with §\$38.113 through 38.123 of this part. Compliance with §38.125 of this part shall be required only to the extent necessary to meet the requirements of paragraph (d) of this section.
- (2) Single-level dining and lounge cars shall have at least one connecting doorway complying with §38.113(a)(2) of this part connected to a car accessible to persons using wheelchairs or mobility aids, and at least one space complying with §\$38.125(d) (2) and (3) of this part, to provide table service to a person who wishes to remain in his or her wheelchair, and space to fold and store a wheelchair for a person who wishes to transfer to an existing seat.
- (3) Bi-level dining cars shall comply with \$38.113(a)(2), 38.115(b), 38.117(a), and 38.121 of this part.
- (4) Bi-level lounge cars shall have doors on the lower level, on each side of the car from which passengers board, complying with §38.113, a restroom complying with §38.123, and at least one space complying with §38.125(d) (2) and (3) to provide table service to a person who wishes to remain in his or her wheelchair and space to fold and wishes to transfer to an existing seat.
- (5) Restrooms, complying with §38.123 shall be provided in single-level rail passenger coaches and food services cars adjacent to the accessible seating locations required by paragraph (d) of this section. Accessible restrooms are required in dining and lounge cars only if restrooms are provided for other passengers.
- (6) Sleeper cars shall comply with §§38.113 (b) through (d), 38.115 through 38.121, and 38.125, of this part, and have at least one compartment which can be entered and used by a person using a wheelchair or mobility aid and complying with §38.127 of this part.
- (b)(1) If physically and operationally practicable, intercity rail cars shall comply with §38.113(d) of this part for level boarding.
- (2) Where level boarding is not structurally or operationally practicable,

#### § 38.113

intercity rail cars shall comply with §38.125.

- (c) If portions of the car are modified in a way that it affects or could affect accessibility, each such portion shall comply, to the extent practicable, with the applicable provisions of this subpart. This provision does not require that inaccessible cars be retrofitted with lifts, ramps or other boarding devices.
- (d) Passenger coaches or food service cars shall have the number of spaces complying with §38.125(d)(2) of this part and the number of spaces complying with §38.125(d)(3) of this part, as required by §37.91 of this title.
- (e) Existing cars retrofitted to meet the seating requirements of §37.91 of this title shall comply with §38.113(e), §38.123, §38.125(d) of this part and shall have at least one door on each side from which passengers board complying with §38.113(d) of this part. Existing cars designed and manufactured to be accessible in accordance with the Secretary of Transportation regulations implementing section 504 of the Rehabilitation Act of 1973 that were in effect before October 7, 1991, shall comply with §38.125(a) of this part.

## §38.113 Doorways.

- (a) Clear width. (1) At least one doorway, on each side of the car from which passengers board, of each car required to be accessible by §38.111(a) and where the spaces required by §38.111(d) of this part are located, and at least one adjacent doorway into coach passenger compartments shall have a minimum clear opening width of 32 inches.
- (2) Doorways at ends of cars connecting two adjacent cars, to the maximum extent practicable in accordance with regulations issued under the Federal Railroad Safety Act of 1970 (49 CFR parts 229 and 231), shall have a clear opening width of 32 inches to permit wheelchair and mobility aid users to enter into a single-level dining car, if available.
- (b) Passageway. Doorways required to be accessible by paragraph (a) of this section shall permit access by persons using mobility aids and shall have an unobstructed passageway at least 32 inches wide leading to an accessible sleeping compartment complying with

§38.127 of this part or seating locations complying with §38.125(d) of this part. In cars where such doorways require passage through a vestibule, such vestibule shall have a minimum width of 42 inches. (see Fig. 4)

- (c) Signals. If doors to the platform close automatically or from a remote location, auditory and visual warning signals shall be provided to alert passengers of closing doors.
- (d) Coordination with boarding platforms.—(1) Requirements. Cars which provide level-boarding in stations with high platforms shall be coordinated with the boarding platform or minihigh platform design such that the horizontal gap between a car at rest and the platform shall be no greater than 3 inches and the height of the car floor shall be within plus or minus % inch of the platform height. Vertical alignment may be accomplished by car air suspension, platform lifts or other devices, or any combination.
- (2) Exception. New cars operating in existing stations may have a floor height within plus or minus  $1\frac{1}{2}$  inches of the platform height.
- (3) Exception. Where platform setbacks do not allow the horizontal gap or vertical alignment specified in paragraph (d) (1) or (2), platform or portable lifts complying with §38.125(b) of this part, or car or platform bridge plates, complying with §38.125(c) of this part, may be provided.
- (4) Exception. Retrofitted vehicles shall be coordinated with the platform in existing stations such that the horizontal gap shall be no greater than 4 inches and the height of the vehicle floor, under 50% passenger load, shall be within plus or minus 2 inches of the platform height.
- (e) Signage. The International Symbol of Accessibility shall be displayed on the exterior of all doors complying with this section unless all cars and doors are accessible and are not marked by the access symbol (see fig. 6). Appropriate signage shall also indicate which accessible doors are adjacent to an accessible restroom, if applicable.

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